

R52-39

NOTES AND BRIEF ARTICLES

A REFRIGERATOR CABINET FOR FUNGAL CULTURES

In 1947 the writers had constructed in the shops of the Philadelphia Quartermaster Depot for use in the Biological Laboratories of that installation a stainless steel cabinet for holding test tube slants of fungous cultures, and more recently two cabinets of similar design were constructed by a firm in Boston for use at the Farlow Herbarium of Harvard University. The three cabinets differ only in minor detail. They were made to fit ordinary household refrigerators. They have proven to be satisfactory and so convenient and saving of time and space over the wire basket method that it is felt that a note on the specifications might be useful to others. The idea is not new. Cabinets of a more or less similar nature have been seen in several laboratories. Those illustrated in this note do perhaps represent something of a refinement over some of those previously seen. Raper, Thom, and Fennel (A Manual of the Penicillia, p. 80. 1949) show a view of cabinets of somewhat similar design in which the trays are fashioned of perforated brass sheeting to allow maximum air circulation.

A general view of the cabinet and refrigerator in use at Philadelphia is shown in FIG. 1 (photo by Photographic Department, Philadelphia Quartermaster Depot).

In FIG. 2 are presented diagrams and specifications of one of the cabinets at Harvard. The overall dimensions may of course be modified to suit the particular refrigerator at hand. That in FIG. 2 was designed for a Hotpoint, model EB 8-2 or EB 8-4, size 8 cubic feet, having an inside height of $41\frac{1}{2}$ in., a width of 23 in., and a front to back depth of 15 in. Each tray holds 2 rows of 16×150 mm. test tubes making 60 test tubes per tray and a total capacity of 1260 cultures for the cabinet. Using 13×100 mm. tubes, which is also a satisfactory size, 3 rows may be placed in each tray, 102 per tray, or a total of 2142. This cabinet was made in 1949 by the Wrought Iron Kitchen Equipment Company,

Boston, Mass., using polished stainless steel, finished in a first-class manner with no rough edges, for \$186.00. It is important that the steel be of a proper gauge to avoid excess weight and yet provide ample rigidity. A length of glass tubing of suitable thickness



FIG. 1.

placed between the rows of tubes prevents any lengthwise slippage and each culture tube is then held firmly in place. In practice there has been no apparent reason for having the bottoms of the trays perforated.

Where cultures are to be kept in the growing condition, rather than in the lyophilized state, the tray method has several desirable features. The trays are readily carried to and from the transfer room. The cultures are always in order and easily located. The label or crayon marks are on the upper side of the tubes where they may be read at a glance and where they do not rub off. The tubes are placed flat on the tray with the agar surface up, thus making the colony easily observed. Large numbers of slants may be

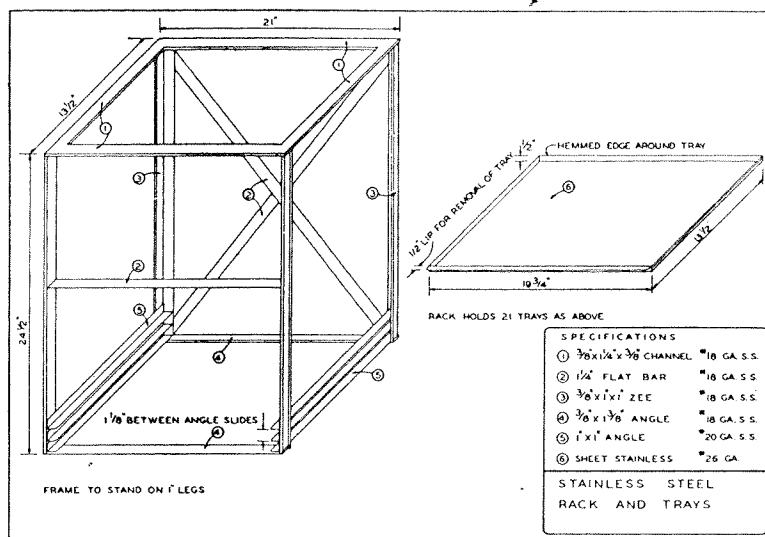


FIG. 2.

quickly scanned for evidence of contamination without the necessity of handling the tubes individually. The collection so kept is compact, neat, clean, and attractive.—W. LAWRENCE WHITE AND R. T. DARBY.